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HUMAN BLOOD IN NEW YORK CITY: THEN (1956)*

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Great changes have occurred in blood-transfusion services in New York City during the past 20 years. Basic to these changes is this report, which was based on data collected for the year 1956 and published by the Academy in 1958.† As far as I can determine, the report is the first and only comprehensive, in-depth study of its kind ever published anywhere. My remarks of necessity will be based in large part on this report and I shall quote extensively from it without further specific acknowledgment of my substantial dependence on its contents.

The report was based upon a study conducted by the Committee on Public Health under the direction of its Subcommittee on Blood Survey, whose membership included Doctors Milton J. Goodfriend (chairman), Henry J. Aranow, Jr., Alvan L. Barach, Linn J. Boyd, L. Wittington

^{*}Presented in part at a meeting on *Human Blood in New York City: Then (1956) and Now (1975)* held by the Committee on Public Health of the New York Academy of Medicine November 3, 1975.

[†]Human Blood in New York City: A Study of Its Procurement, Distribution and Utilization. Available from the Committee on Public Health of the New York Academy of Medicine.

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Gorham, Harry Most, and Howard A. Patterson. Dr. Harry D. Kruse, executive secretary of the Committee on Public Health at that time, was the general director of the study. Dr. Frederick R. Bailey was chairman of the Committee on Public Health and Dr. J. Murray Steele was vice chairman.

Prior To 1941

In 1927 a Cooperative Blood Donors Bureau was organized. In 1929 the Committee on Public Health Relations of the New York Academy of Medicine conducted a study and recommended the enlargement of the Blood Donors Bureau. As a result, the Blood Transfusion Betterment Association (later named the Blood Transfusion Association) was incorporated in 1929 on a nonprofit basis; its principal purpose was to increase the supply of whole blood for transfusion in New York City. In 1931 the Blood Transfusion Betterment Association and the Academy's Committee on Public Health Relations assisted the New York City Department of Health in amending the Sanitary Code. In addition, the association established a registry of certified blood donors to serve hospitals and physicians. In 1935 the Certified Blood Donor Service was organized as a profitmaking company; in 1936 it began to produce blood-typing sera for national distribution. In 1937 the Kings County Hospital Blood Bank was established. Soon afterward blood banks were established by the Mount Sinai Hospital, Bellevue Hospital, and the New York Hospital. The profit-making Pioneer Blood Bank was organized in 1938.

In 1940 a Plasma for Britain project was initiated by the Blood Transfusion Betterment Association in conjunction with the American Red Cross and six hospitals—Lenox Hill Hospital, the Mount Sinai Hospital, the New York Hospital, New York Post Graduate Medical School and Hospital, Presbyterian Hospital, and St. Luke's Hospital. Approximately 5,500 liters of serologically and bacteriologically tested plasma were prepared and shipped to Great Britain. This project is reputed to have laid the foundation for the Blood Donor Service of the American Red Cross during World War II.

1941 то 1948

In 1941 the New York Post Graduate Medical School and Hospital established the University Blood Bank as a nonprofit organization.

Between 1941 and 1945 the American Red Cross collected more than 2

million pints of blood in the greater New York area for the purpose of supplying blood and blood derivatives to the United States armed forces throughout the world. This was the first major undertaking of its kind; it focused attention for the first time on the great potentialities offered by successful solution of the problems of handling whole blood and blood products on a large scale.

In 1942 the Inter-County Blood Bank on Long Island was established on a nonprofit basis.

1948 то 1956

In 1948 the New York Regional Blood Program was established as a part of the National Blood Program. Its operation was based on an agreement among the American Red Cross, the New York City Departments of Health and Hospitals, the New York Academy of Medicine, the five county medical societies of greater New York, and the Greater New York Hospital Association. Its purpose was to collect and distribute blood and blood derivatives for the armed forces, for civil defense, and for peace-time disasters, and to supplement the supply of blood in municipal, voluntary, and proprietary hospitals and for individual physicians.

At about this time several profit-making blood banks came into being, including the Brooklyn Donor Center, the Knickerbocker Blood Bank, and the Westchester Laboratories.

In 1953 the Blood Banks Association of New York State was incorporated to federate the blood banks of New York state into one organization. In addition, its purposes included fostering cooperation among blood banks, encouraging the development of blood banks where they were needed, extending medical knowledge, advancing the study of and the utilization of whole blood, and enlightening the public with regard to the problem of handling blood. This nonprofit organization started its Blood Assurance Program in Batavia, N.Y., in 1953 and conducted some preliminary activities in Newburg, Middletown, and Nyack, N.Y. At about this time the Blood Assurance Program began to falter, and, as I understand it, the Medical Society of the State of New York, convinced of the need for such a program, was persuaded to take over responsibility for it. The Medical Society put substantial effort, enthusiasm, good will, and funds into the promotion of the Blood Assurance Program. Late in 1954 the Medical Society requested the cooperation of the Greater New York Hospital Association in promoting the development of the program in New

York City. The Greater New York Hospital Association referred this request to its Professional Services Committee, of which I was chairman at that time.

Our committee studied the Medical Society's program with the help of several people who were knowledgeable about hospital blood banks, including Dr. Aaron Kellner, Dr. Peter Vogel, and Dr. Jack Geiger. At the conclusion of our study early in 1955 the committee recommended to the board of governors of the Greater New York Hospital Association that the Association decline to cooperate in the promotion of the Medical Society's Blood Assurance Program. We concluded that this program was based on a tiny segment of the community in which it was organized, and was operated and controlled solely by the Medical Society—the doctors.

In the opinion of our committee and based on the experience of several highly successful programs in the United States (including one in Seattle and another in Milwaukee), this would not prove successful. To be successful, such a blood-assurance program should be broadly based in the community with appropriate representation of the public—who would be the donors of the blood as well as the recipients of the blood when they were patients in hospitals—as well as doctors, hospitals, business and industry, labor, and organizations representing various groups in the community. In May 1955 I addressed the House of Delegates of the Medical Society of the State of New York at its annual convention in Buffalo and explained why the Greater New York Hospital Association declined to participate in the Medical Society's Blood Assurance Program.* I urged the Medical Society to participate in a broadly based community organization to achieve an effective blood program. The Medical Society voted to approve our recommendation and to cooperate with the Greater New York Hospital Association in the development of a blood program which would be organized and structured along the lines we had recommended. Upon returning to New York I organized an ad hoc committee to review the problem and develop a solution.

THE STUDY

From the very outset we were determined to develop a solution which would be acceptable to the entire community and not just to one segment

^{*}Groeschel, A.H.: Statements of representatives of Greater New York Hospital Association. N.Y. State J. Med.: 37-40, Sept. 1, 1955.

of the community. In January 1956 I chaired a meeting of representatives of the following organizations to consider what action might be taken to identify and solve the growing problems in collecting, processing, distributing, and utilizing blood:

American Federation of Labor

American Red Cross, New York Regional Blood Program

Associated Hospital Service of New York

Blood Banks Association of New York State, Inc.

Blood Transfusion Association

Congress of Industrial Organizations

Coordinating Council, First District Branch, Medical Society of the State of New York

Department of Health of the City of New York and its Bureau of Laboratories

Department of Hospitals of the City of New York

Greater New York Hospital Association

Medical Society of the State of New York

United Hospital Fund

The representatives of these organizations agreed that problems concerning the handling of blood existed, that factual data regarding existing practices were inadequate, and that an objective study was a necessary first step to determine a course of future action. We turned to the New York Academy of Medicine as an unbiased organization of suitable professional standing to undertake the desired objective appraisal. The Committee on Public Health of the Academy agreed to accept the responsibility for the assignment; it established a subcommittee to direct the study and to evaluate the findings. The Academy retained the consulting firm of Cresap, McCormick, and Paget to collect and analyze data under the direction of the subcommittee of the Committee on Public Health. The cost of the study was \$36,000, which we were able to obtain through three equal contributions from the Commonwealth Fund, the New York Foundation, and the Rockefeller Brothers Fund.

The major objectives of the study were:

1) To obtain factual data concerning policies, practices, procedures, quantity, facilities, equipment, replacement ratios, charges, and other information related to procuring, processing, preserving, using, and exchanging or selling whole human blood and blood derivatives in New York City

- 2) To identify the problem that must be solved in order to establish better practices and to obtain improved results in dealing with whole human blood and blood derivatives
- 3) To recommend actions to be taken to place blood-handling activities in New York City on a sound basis in terms of community needs

THE REPORT

The New York Academy of Medicine published its report *Human Blood in New York City* in 1958 on the basis of data gathered for the year 1956. The 147-page report includes a tremendous amount of information—much more than could or should be presented here. Accordingly, I shall present a brief sample of the kinds of information it contains and summarize the problems identified and the recommendations made in the report.

First, here is a brief sample of the kinds of information presented in the report:

Of the 158 participating organizations, 57 engage in the collection of whole blood (48 hospitals, 8 professional [commercial] blood banks and the American Red Cross).

The 57 collecting organizations collected 348,571 units of whole blood during 1956. Professional blood banks collected 158,856 units or 45.6 percent; the American Red Cross collected 124,375 units or 35.7 percent; the hospitals collected 65,340 units or 18.7 percent.

About 70.8 percent of all blood collected in New York City was collected in the borough of Manhattan.

In terms of type of donor, 42.0 percent of all whole blood was obtained from professional (paid) donors; 35.2 percent from persons with a membership in one of the credit plans; 20 percent from voluntary donors for replacement of whole blood used; and 2.8 percent from other types of donors.

Procedures to safeguard donors differ among the organizations which collect whole blood. The completeness of physical examinations and medical histories varies greatly and often they are superficial.

Many different recruiting techniques are used with varying degrees of effectiveness and there is some overlapping and duplication of effort. Fifty-five of the 57 collecting organizations bleed

professional (paid) donors. The payment varies from \$5.00 to \$40.00 for positive type whole blood and from \$5.00 to \$50.00 for negative type whole blood.

The using organizations have many different recording systems of varying accuracy and completeness. Only 120 (81.1 percent) of all hospitals reported that they maintain records of transfusion reactions.

Of the 48 hospitals which collect whole blood, only 30 have replacement ratio policies. These 30 hospitals employ 20 different replacement ratios which range as high as 5 for 1 *plus* an administrative charge.

So much for the kinds of information presented in the report.

Second, I shall summarize the problem areas in the collection, processing, distribution, and use of whole blood which were identified in the report. The major problem areas are listed as follows:

- 1) Lack of community interest and purpose
- 2) Perishable nature of blood
- 3) Policy differences in the handling of blood
- 4) Public misunderstanding
- 5) Lack of a coordinating agency
- 6) Uncoordinated planning
- 7) Incomplete and nonuniform records
- 8) Lack of standardized processing
- 9) Shortage of personnel
- 10) Limited facilities

The beginning of Chapter VI, titled Recommendations of the Committee, summarizes in general terms the principal problems which the study uncovered and which the study's recommendations were designed to correct:

The data that have been presented constitute evidence of the disunity, disorganization and disorder that characterize existing blood-handling activities in New York City. It is clear that the paramount and imperative need is to bring unity, organization and order to these activities, to establish a system to supplant the present jumble of highly individualistic agencies operating diversely and unrelatedly. It cannot be overemphasized that the provision of blood for therapeutic use is a community concern. The biggest obstacle to realization of this fundamental thesis is the

prevailing climate of attitude. Individual agencies, each operating in its small autonomy are not gauging their thinking on a community scale or visualizing their role in the larger situation; nor are they working together with mutual trust. They lack community-mindedness and true associated effort. Their very practices betray a mutual disregard, lack of confidence and even competition.

Several years after the publication of the report and before the recommendations in the report could be implemented, the following editorial appeared in *The New York Times* of April 3, 1962 (p. 38); it summarized forcefully and dramatically the problems which the study uncovered.

MEETING THE BLOOD PROBLEM

The Times' recent survey of the availability of blood for the sick has unearthed an appalling picture of shortage, confusion and near-anarchy. Every day of the year the lives of literally hundreds of New Yorkers depend upon having access to the right kind of blood in the proper amount at the place where they are being treated. Yet present conditions in this area are such that many people have no assurance blood will be available for them when needed, while others can get blood only at enormous expense or by dint of frantic pleading among their friends and neighbors.

The key to the problem is that there is simply not enough blood available. As a community, we New Yorkers do not understand the great importance of donating blood regularly. Even worse, some of us seem to think that insurance for the costs of medical care in some way "guarantees" the physical availability of blood when we need it. One of the high priority tasks in safeguarding community health is to educate the people of this city in the vital importance of blood donation and the need for regular contributions by far greater numbers of New Yorkers.

Furthermore, the present disorder among agencies involved in blood collection and supply—agencies ranging from the Red Cross and individual hospitals to private business enterprises making profits out of buying and selling blood—must be ended. The lack of cooperation among many existing agencies and the lack of uniformity in their practices are intolerable. There are vested interests and old rivalries in this field; but surely the evident need for a central coordinating agency should be great enough to overcome the obstacles. Blood is too important a matter to permit the present disgraceful and dangerous situation to continue.

Third, I shall summarize the recommendations of the committee. At the conclusion of its report, the Academy made 60 recommendations; the first and second were basic to the resolution of the problems which the study had uncovered. These first two recommendations and their accompanying explanations are as follows:

1. All of the blood-handling agencies in New York City which requested the present survey and participated in it formally, organize on a permanent basis a community body concerned with blood.

The present ad hoc committee could be helpful during the creation and establishment of the community organization.

It should be non-profit and self-regulating. Membership would be voluntary and would be based on accreditation according to standards determined and imposed by the group itself. Organizationally, its power to carry out its programs would depend on the consent of the members. Actually, its effectiveness would derive from the mutuality of interest among its members, from the intent of the agencies in forming the body and seeking membership and from the obligations as well as the privileges implicit in membership. Through moral suasion and public opinion, it would have an even broader sphere of influence; undesignedly it would exercise an influence on the operations of any non-member agency.

2. The community blood handling organization set up and operate a community blood center.

Conclusion

In 1959 the ad hoc group which requested the Academy to do the study, organized the Community Blood Council of Greater New York, and the Council has worked ever since to implement the recommendations made by the Academy in its report. My continuing participation in this effort in one capacity or another over a period of almost 20 years has been one of the most gratifying and rewarding experiences of my life.